

Thursday, May 25, 2017 10:10:32 AM

162088

Ship JUNE 15

Page 1

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 6/1/2017 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 6/2/2017 **Req'd Qty:** 1.00 *** 1 ***

Customer:

Reference:

Approvals: Process Plan: DAS Date: MAY 25 2017 Tooling: _____ Date: _____
QC: 21 Date: _____ SPC (Y/N): _____ Date: _____

Run	Start	*NR1*
	Stop	*NR2*
1	100	100
2	100	100
3	100	100
4	100	100
5	100	100
6	100	100
7	100	100
8	100	100
9	100	100
10	100	100
11	100	100
12	100	100
13	100	100
14	100	100
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16	100	100
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91	100	100
92	100	100
93	100	100
94	100	100
95	100	100
96	100	100
97	100	100
98	100	100
99	100	100
100	100	100

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr	
647.7300	C	

100	Document Control	JUN 14 2017	0.00
100	DOCUMENT CONTROL		
DC	Memo		0.00
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP 647.7304		

100

DC

Doc.Control -USB or Paperwork

110	Pick Kit	0.00
-----	----------	------

110

Packaging

Packaging

120	QC4- 100% Inspect kits for completeness	0.00
-----	---	------

120

QC

Quality Control

DAS

6

9-80

DAS
28
9-89

JUL 3 1 2017

DAS
6
9-89

JUN 15 2017

DAS
37
9-88

**DAS
28
9-89**

JUL 3 1 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																																																																																																																										
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Work Order ID 162088

Thursday, May 25, 2017 10:10:32 AM

162088

Page 2

Item ID: 647.7304 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: EC135 T2/P2 Cable Cutters System
 Start Date: 6/1/2017 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 6/2/2017 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* Packaging	Identify as per dwg & Stock Location: _____ Packaging	0.00				DAS 28 0-39		JUL 31 2017	
	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP 647.7304 Location: _____								
140 *140* QC	QC21- Final Inspection - Work Order Release	0.00							
Quality Control	Memo	0.10							

17/7/31 
 **JUL 31 2017**

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause			FAULT CATEGORY		
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
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LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐				

Picklist Print

Thursday, May 25, 2017 10:10:36 AM

Page 1

Work Order ID: 162088

162088

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 6/1/2017

Required Date: 6/2/2017

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 16.04.27 NEW ISSUE DD VERF:JLM IPP
REV:B 16.11.15 dwg rev.c DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

600.0990		Purchased	No			110	Each	26.0000	** 1	1			
600 0990 Magnabond 6398 Part A Size 112 ml DAS 28 9-89 exp. 1 feb 2018													

Location	Loc Qty	Loc Code
PKG	26	
M136586	1	
M136862	1	
M137073	11	
M137495	12	
M134249	1	

1/1/2017

600.0991		Purchased	No			110	Each	26.0000	** 1	1			
600 0991 Magnabond 6398 Part B Size 112 ml DAS 28 9-89 exp. 1 feb 2018													

Location	Loc Qty	Loc Code
PKG	26	
m136586	2	
m136862	1	
m137073	11	
m137495	12	
m134249	0	

1/1/2017

600.1012		Purchased	No			110	Each	21.0000	** 1	1			
600 1012 Sealant PR1425B2 (#654 sem) DAS 28 9-89 exp. 12/17													

Location	Loc Qty	Loc Code
cck017	21	
m136838	1	
m137321	6	
m137371	14	

**

JUN 15 2017

DAS 31 9-89

DAS 31 9-89

DAS 31 9-89

DAS 31 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																							
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OTHER :																																																															

Picklist Print

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Work Order ID: 162088

162088

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 6/1/2017

Required Date: 6/2/2017

Start Qty: 1.00

Required Qty: 1.00

601.2045 Purchased No

110 Each 27.0000

601 2045

RTV (LOCTITE 598) McMaster p/n: 6641A41

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK096

9

m137538

9

CCK108A

10

m137538

10

GA

8

m134260

8

** 

1

DAS
6
9-89

JUN 15 2017

DAS
31
9-89

601.2375 Manufactured No

110 Each 24.0000

601 2375

Washer

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK096

24

91708

24

Manufactured No

110 Each 25.0000

601.2999

601 2999

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK098

25

93369

25

Purchased No

110 Each 4.0000

601.3004

601 3004

Camloc Stud - 26S8#11

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK098

4

M130388

4

** 

2

DAS
6
9-89

JUN 15 2017

DAS
31
9-89

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Shop Packet Print

Page 2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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								Completed By																	
								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : ☐																			

Picklist Print

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Page 3

Work Order ID: 162088

162088

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 6/1/2017

Required Date: 6/2/2017

Start Qty: 1.00

Required Qty: 1.00

601.3005

Manufactured No

110

Each

16.0000

2

601 3005

Camloc Retainer - 2600-LW

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK098

16

158642

16

601.3006

Purchased No

110

Each

4.0000

2

601 3006

Camloc Receptacle 26R 16-1

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK098

4

M130388

4

601.3011

Manufactured No

110

f

93.1000

1.4

601 3011

P-Seal McMaster P/N: 1142A76

DAS
38
9-89

Location

Loc Qty

Loc Code

CCK095

93

91709

43

M137538

50

CCK099

0.1

M130388

0.1

CUT AT 16.00"

601.3902

Manufactured No

110

Each

12.0000

2

601 3902

Eye Bolt

DAS
28
9-89

Location

Loc Qty

Loc Code

cck101

12

147212

1

153184

11

**

**

**

**

DAS
JUN 15 2017 6
9-89

DAS
JUN 15 2017 6
9-89

DAS
JUN 15 2017 6
9-89

DAS
JUN 15 2017 6
9-89

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																															
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Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval																																																																
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																															
Root Cause <table style="width:100%; border: none;"> <tr><td style="border: none;">Environment ☐</td><td style="border: none;">No Re-verification ☐</td></tr> <tr><td style="border: none;">Design ☐</td><td style="border: none;">Operator ☐</td></tr> <tr><td style="border: none;">Doc/Data ☐</td><td style="border: none;">Offset/Setup ☐</td></tr> <tr><td style="border: none;">Equip/Tooling ☐</td><td style="border: none;">Supplier ☐</td></tr> <tr><td style="border: none;">Handling/Pre ☐</td><td style="border: none;">Training ☐</td></tr> <tr><td style="border: none;">Material ☐</td><td style="border: none;">Use for Testing ☐</td></tr> <tr><td style="border: none;">Internal Transport ☐</td><td style="border: none;">Poor Information ☐</td></tr> <tr><td style="border: none;">Tribal Knowledge ☐</td><td style="border: none;">Rushing ☐</td></tr> <tr><td style="border: none;">LOA ☐</td><td style="border: none;">Product Improvement ☐</td></tr> <tr><td style="border: none;">Substation ☐</td><td style="border: none;">Process Improvement ☐</td></tr> <tr><td style="border: none;">Past Expiry Date ☐</td><td style="border: none;">Manufacturing Process ☐</td></tr> <tr><td style="border: none;">Misidentified ☐</td><td style="border: none;">Past Due ☐</td></tr> </table>		Environment ☐	No Re-verification ☐	Design ☐	Operator ☐	Doc/Data ☐	Offset/Setup ☐	Equip/Tooling ☐	Supplier ☐	Handling/Pre ☐	Training ☐	Material ☐	Use for Testing ☐	Internal Transport ☐	Poor Information ☐	Tribal Knowledge ☐	Rushing ☐	LOA ☐	Product Improvement ☐	Substation ☐	Process Improvement ☐	Past Expiry Date ☐	Manufacturing Process ☐	Misidentified ☐	Past Due ☐	FAULT CATEGORY <table style="width:100%; border: none;"> <tr> <td style="border: none;">Pressure/Forced ☐</td> <td style="border: none;">Temperature/Cure ☐</td> <td style="border: none;">Power Loss/Surge ☐</td> <td style="border: none;">Positioned Wrong ☐</td> </tr> <tr> <td style="border: none;">Bending ☐</td> <td style="border: none;">Set-up ☐</td> <td style="border: none;">Folio/Program ☐</td> <td style="border: none;">Outside Dimensions ☐</td> </tr> <tr> <td style="border: none;">Centre Not Concentric ☐</td> <td style="border: none;">BOM/Route ☐</td> <td style="border: none;">Grain ☐</td> <td style="border: none;">Over/Under tolerance ☐</td> </tr> <tr> <td style="border: none;">Cracks ☐</td> <td style="border: none;">Broken/Damage/Defect ☐</td> <td style="border: none;">Weld ☐</td> <td style="border: none;">Part Incorrect ☐</td> </tr> <tr> <td style="border: none;">Crimp/Kink/Ripple/Wave ☐</td> <td style="border: none;">Inspection Incomplete/Unqualified ☐</td> <td style="border: none;">Wrong Stock Pulled ☐</td> <td style="border: none;">Part Lost/Missing ☐</td> </tr> <tr> <td style="border: none;">Cuffs ☐</td> <td style="border: none;">Contamination ☐</td> <td style="border: none;">Out of Sequence ☐</td> <td style="border: none;">Part Moved ☐</td> </tr> <tr> <td style="border: none;">Crushing ☐</td> <td style="border: none;">Countersink ☐</td> <td style="border: none;">Off-set ☐</td> <td style="border: none;">Drawing ☐</td> </tr> <tr> <td style="border: none;">Heat Treat ☐</td> <td style="border: none;">Cut Too Short ☐</td> <td style="border: none;">Mislabeled ☐</td> <td style="border: none;">Finish ☐</td> </tr> <tr> <td style="border: none;">Wave/Twist in Tube ☐</td> <td style="border: none;">Instructions Incomplete/Unclear ☐</td> <td style="border: none;">Fit/Function ☐</td> <td style="border: none;">Misread ☐</td> </tr> <tr> <td style="border: none;">Marks/Chatter ☐</td> <td style="border: none;">Drill Holes ☐</td> <td style="border: none;">Misaligned/off center ☐</td> <td style="border: none;">Turning Sequence ☐</td> </tr> </table>						Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
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		OTHER : _____																																																																					

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Page 4

Work Order ID: 162088

162088

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 6/1/2017

Required Date: 6/2/2017

Start Qty: 1.00

Required Qty: 1.00

647.0112
647 0112

Strut Bracket

68-6
82
DAS

Manufactured No

110 Each

45.0000

**

DAS

6

9-89

JUN 15 2017

Location

Loc Qty

Loc Code

CCK106

45

159844

45

110 Each

1.0000

**

DAS

6

9-89

JUN 21 2017

647.1601
647 1601

Wiper Deflector Aft

DAS
28
9-89

Manufactured No

110 Each

1.0000

**

DAS

6

9-89

JUN 21 2017

Location

Loc Qty

Loc Code

CCK091

1

155569

1

110 Each

15.0000

**

DAS

6

9-89

JUN 15 2017

647.1602
647 1602

Doubler Assembly

DAS
28
9-89

Manufactured No

110 Each

15.0000

**

DAS

6

9-89

JUN 15 2017

Location

Loc Qty

Loc Code

CCK107

15

M130388

15

110 Each

5.0000

**

DAS

6

9-89

JUN 15 2017

647.1610
647 1610

Wiper Deflector Fwd

DAS
28
9-89

Manufactured No

110 Each

5.0000

**

DAS

6

9-89

JUN 15 2017

Location

Loc Qty

Loc Code

CCK091

5

125082

5

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Page 4

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval 																																																										
Description Work Order Deviation				Disposition				Completed By																																																									
								Lead hand / Supervisor Approval Verification																																																									
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Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

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Work Order ID: 162088

162088

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 6/1/2017

Required Date: 6/2/2017

Start Qty: 1.00

Required Qty: 1.00

647.1702

Manufactured No

110

Each

5.0000

2 2

647 1702

Skid Deflector Assembly

**

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK033

5

153324

1

154422

2

157781

2

JUN 26 2017
DAS 6 31 9-89

647.1810

Manufactured No

110

Each

15.0000

1 1

647 1810

Nose Door Doubler

**

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK108

15

92070

1

M130388

14

JUN 15 2017
DAS 6 31 9-89

647.1811

Manufactured No

110

Each

37.0000

2 2

647 1811

Spacer

**

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK108

37

92072

3

M130388

34

JUN 15 2017
DAS 6 31 9-89

647.1812

Manufactured No

110

Each

236.0000

13 13

647 1812

Shim

**

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK107

236

92073

38

M130388

198

JUN 15 2017
DAS 6 31 9-89

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DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER : _____			

Picklist Print

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Work Order ID: 162088

162088

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 6/1/2017

Required Date: 6/2/2017

Start Qty: 1.00

Required Qty: 1.00

647.1814

Manufactured No

110

Each

28.0000

**

1

647 1814

Gusset LH

DAS
28
9-89LocationLoc QtyLoc Code

cck122A

28

92075

4

M130388

24

647.1815

Manufactured No

110

Each

26.0000

**

1

647 1815

Gusset RH

DAS
28
9-89LocationLoc QtyLoc Code

CCK110

2

92076

2

cck122A

24

M130388

24

647.1818

Manufactured No

110

Each

25.0000

**

1

647 1818

Nose Door Spacer

DAS
28
9-89LocationLoc QtyLoc Code

CCK110

25

92079

1

M130388

24

647.1913

Manufactured No

110

Each

13.0000

**

1

647 1913

Tee

DAS
28
9-89LocationLoc QtyLoc Code

CCK093

13

114126

3

92229

10

DAS
6
9-89
JUN 15 2017DAS
31
9-89DAS
6
9-89
JUN 15 2017DAS
31
9-89DAS
6
9-89
JUN 15 2017DAS
31
9-89DAS
6
9-89
JUN 15 2017DAS
31
9-89

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Work Order update only

Work Order: _____		DISPOSITION		AGAINST DEPARTMENT/PROCESS					
Part No. _____		Rework ☐	Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐			
NCR No. _____		Scrap ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐			
		Use-as-is ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐			
		Suspected Unapproved ☐	Large Fab ☐	Composite ☐	Supplier ☐				
Date : _____		Step # : _____		QTY Effective : _____			MRB (QSI042) Approval _____		
Description Work Order Deviation				Disposition				Completed By _____	
								Lead hand / Supervisor Approval Verification _____	
								QC / QA Coordinator Approval _____	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER : _____							

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Work Order ID: 162088

162088

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 6/1/2017

Required Date: 6/2/2017

Start Qty: 1.00

Required Qty: 1.00

647.1914
647 1914
Bracket

Manufactured No

110 Each 1.0000

**

Location

Loc Qty

Loc Code

CCK110

1

153314

1

110 Each 22.0000

**

Location

Loc Qty

Loc Code

CCK093

22

114127

6

92230

4

M130388

12

110 Each 2.0000

**

Location

Loc Qty

Loc Code

cck001

1

147224

1

cck001

1

147224

1

110 Each 2.0000

**

Location

Loc Qty

Loc Code

cck111

2

161383

2

110 Each 0.0000

**

647.2114
647 2114
Upper U Channel

Manufactured No

DAS
28
9-89

647.3201
647 3201
Grounding Cable Assembly

Manufactured No

DAS
28
9-89

647.7501
647 7501
Lower Cutter Assembly

Manufactured No

DAS
28
9-89

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

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Work Order ID: 162088

162088

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 6/1/2017

Required Date: 6/2/2017

Start Qty: 1.00

Required Qty: 1.00

647.7701
647 7701

Strut Assembly

647.7702
9-89

647 7702

Strut Assembly

DAS
28
9-89

Manufactured No

110 Each 0.0000

** 2 160472 JUN 15 2017 DAS 31 9-89

Manufactured No

110 Each 2.0000

** 2 JUN 20 2017 DAS 31 9-89

647.7819
647 7819

Cross Bracket Fwd

DAS
28
9-89

Manufactured No

110 Each 5.0000

** 1 161385 DAS 31 9-89 JUN 15 2017

647.7821
647 7821

Eye Bolt Fitting LH

DAS
28
9-89

Manufactured No

110 Each 7.0000

** 1 DAS 31 9-89 JUN 15 2017

647.7822
647 7822

Eye Bolt Fitting RH

DAS
28
9-89

Manufactured No

110 Each 6.0000

** 1 DAS 31 9-89 JUN 15 2017

Location

Loc Qty

Loc Code

cck 154668

2
2

Location

Loc Qty

Loc Code

CCK115 M130388

5
5

Location

Loc Qty

Loc Code

CCK115 121378
CCK121 130388

1
1
6
6

Location

Loc Qty

Loc Code

CCK115 M130388

6
6

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

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Work Order ID: 162088

162088

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 6/1/2017

Required Date: 6/2/2017

Start Qty: 1.00

Required Qty: 1.00

647.7823 Manufactured No

110 Each 1.0000

647 7823

Cross Bracket Aft

DAS
28
9-89

Location

Loc Qty

Loc Code

cck066

1

146665

1

110 Each 0.0000

647.7910

647 7910

Angle Bracket

DAS
28
9-89

Manufactured No

647.7911

647 7911

Bracket

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK115

5

93983

1

M130388

4

110 Each 17.0000

647.7912

647 7912

Clip

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK115

17

157794

17

110 Each 0.0000

647.7913

647 7913

Doubler

DAS
28
9-89

Manufactured No

647.7914

647 7914

Bracket

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK115

17

157794

17

110 Each 0.0000

647.7914

647 7914

Bracket

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK115

17

157794

17

110 Each 0.0000

647.7914

647 7914

Bracket

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK115

17

157794

17

110 Each 0.0000

647.7914

647 7914

Bracket

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK115

17

157794

17

110 Each 0.0000

647.7914

647 7914

Bracket

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK115

17

157794

17

110 Each 0.0000

647.7914

647 7914

Bracket

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK115

17

157794

17

110 Each 0.0000

647.7914

647 7914

Bracket

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK115

17

157794

17

110 Each 0.0000

647.7914

647 7914

Bracket

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK115

17

157794

17

110 Each 0.0000

647.7914

647 7914

Bracket

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK115

17

157794

17

110 Each 0.0000

647.7914

647 7914

Bracket

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK115

17

157794

17

110 Each 0.0000

647.7914

647 7914

Bracket

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK115

17

157794

17

110 Each 0.0000

647.7914

647 7914

Bracket

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK115

17

157794

17

110 Each 0.0000

647.7914

647 7914

Bracket

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK115

17

157794

17

110 Each 0.0000

647.7914

647 7914

Bracket

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK115

17

157794

17

110 Each 0.0000

647.7914

647 7914

Bracket

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK115

17

157794

17

110 Each 0.0000

647.7914

647 7914

Bracket

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK115

17

157794

17

110 Each 0.0000

647.7914

647 7914

Bracket

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK115

17

157794

17

110 Each 0.0000

647.7914

647 7914

Bracket

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK115

17

157794

17

110 Each 0.0000

647.7914

647 7914

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date: _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

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Work Order ID: 162088

162088

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 6/1/2017

Required Date: 6/2/2017

Start Qty: 1.00

Required Qty: 1.00

647.7915

Manufactured No

110

Each

9.0000

******  1

647 7915

Bracket

DAS
28
9-89

Location

Loc Qty

Loc Code

cck116

9

M130388

9

110

Each

16.0000

******  2

647.7916

Manufactured No

647 7916

Bracket

DAS
28
9-89

Location

Loc Qty

Loc Code

cck116

16

M130388

16

110

Each

13.0000

******  1

647.7917

Manufactured No

647 7917

Bracket

DAS
28
9-89

Location

Loc Qty

Loc Code

cck116

13

131356

13

110

Each

11.0000

******  1

647.7918

Manufactured No

647 7918

Bracket

DAS
28
9-89

Location

Loc Qty

Loc Code

cck116

11

119630

11

110

Each

6.0000

******  1

647.7919

Manufactured No

647 7919

Shim

DAS
28
9-89

Location

Loc Qty

Loc Code

cck116

6

157799

6

DAS
6 JUN 15 2017
9-89

DAS
31
9-89

DAS
6 JUN 15 2017
9-89

DAS
31
9-89

DAS
6 JUN 15 2017
9-89

DAS
31
9-89

DAS
6 JUN 15 2017
9-89

DAS
31
9-89

DAS
6 JUN 15 2017
9-89

DAS
31
9-89

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Work Order update only

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Cross tube ☐ Water Jet ☐ Engineering ☐ Machining ☐ Small Fab ☐ Prod. Eng. Coord. ☐ Quality ☐ Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐ Large Fab ☐ Composite ☐ Supplier ☐					
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval	
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause Environment ☐ No Re-verification ☐ Design ☐ Operator ☐ Doc/Data ☐ Offset/Setup ☐ Equip/Tooling ☐ Supplier ☐ Handling/Pre ☐ Training ☐ Material ☐ Use for Testing ☐ Internal Transport ☐ Poor Information ☐ Tribal Knowledge ☐ Rushing ☐ LOA ☐ Product Improvement ☐ Substation ☐ Process Improvement ☐ Past Expiry Date ☐ Manufacturing Process ☐ Misidentified ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Temperature/Cure ☐ Power Loss/Surge ☐ Positioned Wrong ☐ Bending ☐ Set-up ☐ Folio/Program ☐ Outside Dimensions ☐ Centre Not Concentric ☐ BOM/Route ☐ Grain ☐ Over/Under tolerance ☐ Cracks ☐ Broken/Damage/Defect ☐ Weld ☐ Part Incorrect ☐ Crimp/Kink/Ripple/Wave ☐ Inspection Incomplete/Unqualified ☐ Wrong Stock Pulled ☐ Part Lost/Missing ☐ Cuffs ☐ Contamination ☐ Out of Sequence ☐ Part Moved ☐ Crushing ☐ Countersink ☐ Off-set ☐ Drawing ☐ Heat Treat ☐ Cut Too Short ☐ Mislabeled ☐ Finish ☐ Wave/Twist in Tube ☐ Instructions Incomplete/Unclear ☐ Fit/Function ☐ Misread ☐ Marks/Chatter ☐ Drill Holes ☐ Misaligned/off center ☐ Turning Sequence ☐							
OTHER :									

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Work Order ID: 162088

162088

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 6/1/2017

Required Date: 6/2/2017

Start Qty: 1.00

Required Qty: 1.00

647.8510

Manufactured No

110

Each

6.0000

20

20

JUN 15 2017

647 8510

Insert

DAS
28
9-89

Location

Loc Qty

Loc Code

cck116

6

158923

4

M130388

2

161388

DAS
6
9-89

DAS
31
9-89

647.8511

Manufactured No

110

Each

13.0000

4

4

JUN 15 2017

647 8511

Insert

DAS
28
9-89

Location

Loc Qty

Loc Code

cck116

13

158626

13

M130388

0

4

DAS
31
9-89

647.8512

Manufactured No

110

Each

8.0000

2

2

JUN 15 2017

647 8512

Insert

DAS
28
9-89

Location

Loc Qty

Loc Code

cck116

8

159419

8

2

DAS
6
9-89

DAS
31
9-89

93635A212

Purchased No

110

Each

18.0000

4

4

JUN 15 2017

93635A212

Bolt

DAS
28
9-89

Location

Loc Qty

Loc Code

ST588

18

m134700

18

4

DAS
6
9-89

DAS
31
9-89

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DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date: _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

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Work Order ID: 162088

162088

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 6/1/2017

Required Date: 6/2/2017

Start Qty: 1.00

Required Qty: 1.00

AN3-11A Purchased No

110 Each

254.0000

4 4

DAS
6
9-89

AN3-11A
Bolt

DAS
28
9-89

Location

Loc Qty

Loc Code

over003

100

m136192

100

ST349

154

153855

154

**

JUN 15 2017

DAS
31
9-89

AN316C4R Purchased No

110 Each

17.0000

4 4

DAS
6
9-89

AN316C4R
Nut, Jam

DAS
28
9-89

Location

Loc Qty

Loc Code

ST331

17

153850

17

**

JUN 15 2017

DAS
31
9-89

AN3-4A Purchased No

110 Each

407.0000

2 2

DAS
6
9-89

AN3-4A
Bolt

DAS
28
9-89

Location

Loc Qty

Loc Code

ST350

407

m136579

11

m137478

396

**

JUN 15 2017

DAS
31
9-89

AN44-12A Purchased No

110 Each

15.0000

2 2

DAS
6
9-89

AN44-12A
Eyebolt

DAS
28
9-89

Location

Loc Qty

Loc Code

ST339

15

m137280

3

m137587

12

**

JUN 15 2017

DAS
31
9-89

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coor. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																																																																																																																													
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Work Order ID: 162088

162088

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 6/1/2017

Required Date: 6/2/2017

Start Qty: 1.00

Required Qty: 1.00

AN4C7A Purchased No

110 Each 103.0000

AN4C.7A
BOLT

**

DAS
6

JUN 15 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

OVER002

75

m137361

75

ST345

28

m136295

28

AN4CH6A Purchased No

110 Each 31.0000

AN4CH6A
Bolt

**

DAS
6
9-89

JUN 15 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

ST345

31

123525

11

m126176

20

AN665-34R Purchased No

110 Each 24.0000

AN665-34R
Clevis

**

DAS
6
9-89

JUN 15 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

ST330

24

m137361

14

m137587

10

DAS
31
9-89

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DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
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				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
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OTHER : ☐					

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Work Order ID: 162088

162088

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 6/1/2017

Required Date: 6/2/2017

Start Qty: 1.00

Required Qty: 1.00

CCR264SS-3-03

Purchased

No

110

Each

165.0000

24 24

CCR264SS-3-03

Cherry Rivet

DAS
28
9-89

Location

Loc Qty

Loc Code

FP001

10

m137164

10

LG001

13

m134023

13

ST321

142

m137164

142

CCR274SS-3-03

Purchased

No

110

Each

65.0000

4 4

CCR274SS-3-03

Rivet

DAS
28
9-89

Location

Loc Qty

Loc Code

ST321

65

123785

65

CR3212-5-6

Purchased

No

110

Each

100.0000

2 2

CR3212-5-6

Cherry Rivet

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK003

100

124259

100

CR3213-4-2

Purchased

No

110

Each

174.0000

4 4

CR3213-4-2

Cherry Rivet

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK003

100

m137621

100

ST320

74

m137412

74

**

DAS
6
9-89

JUN 15 2017

DAS
31
9-89

**

DAS
6
9-89

JUN 15 2017

DAS
31
9-89

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DAS
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162088

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 6/1/2017

Required Date: 6/2/2017

Start Qty: 1.00

Required Qty: 1.00

CR3213-4-3

Purchased

No

110

Each

270.0000

24

24

CR3213-4-3

Rivet, Cherry

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

92

m136042

92

ST319

178

m136851

178

**

DAS
JUN 15 2017 6
9-89

CR3213-4-4

Purchased

No

110

Each

322.0000

16

16

CR3213-4-4

Rivet, Cherry

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK003

200

m137391

200

ST319

122

m136301

122

**

DAS
6
9-89

DAS
JUN 15 2017 31
9-89

CR3213-4-5

Purchased

No

110

Each

210.0000

8

8

CR3213-4-5

Rivet

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK003

200

M137459

200

ST319

10

M137361

10

**

DAS
6
9-89

JUN 15 2017

65 4 137544 x 2 2

DAS
31
9-89

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Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
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Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	No Re-verification ☐	Operator ☐	Offset/Setup ☐	Supplier ☐	Training ☐	Use for Testing ☐	Poor Information ☐	Rushing ☐	Product Improvement ☐	Process Improvement ☐	Manufacturing Process ☐	Past Due ☐	Pressure/Forced ☐	Bending ☐	Centre Not Concentric ☐	Cracks ☐	Crimp/Kink/Ripple/Wave ☐	Cuffs ☐	Crushing ☐	Heat Treat ☐	Wave/Twist in Tube ☐	Marks/Chatter ☐	Temperature/Cure ☐	Set-up ☐	BOM/Route ☐	Broken/Damage/Defect ☐	Inspection Incomplete/Unqualified ☐	Contamination ☐	Countersink ☐	Cut Too Short ☐	Instructions Incomplete/Unclear ☐	Drill Holes ☐	Power Loss/Surge ☐	Folio/Program ☐	Grain ☐	Weld ☐	Wrong Stock Pulled ☐	Out of Sequence ☐	Off-set ☐	Mislabeled ☐	Fit/Function ☐	Misaligned/off center ☐	Positioned Wrong ☐	Outside Dimensions ☐	Over/Under tolerance ☐	Part Incorrect ☐	Part Lost/Missing ☐	Part Moved ☐	Drawing ☐	Finish ☐	Misread ☐	Turning Sequence ☐
OTHER : _____																																																															

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Page 18

Work Order ID: 162088

162088

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 6/1/2017

Required Date: 6/2/2017

Start Qty: 1.00

Required Qty: 1.00

CR3523-5-3

Purchased

No

110

Each

36.0000

8 8
**

DAS
6
9-89

CR3523-5-3

Rivet

DAS
28
9-89

Location

Loc Qty

Loc Code

ST317

36

m134962

36

110

Each

42.0000

8 8
**

DAS
6
9-89

JUN 15 2017

DAS
31
9-89

LN9025-0820K

Purchased

No

LN9025-0820K

Lock Tab Washer

DAS
28
9-89

Location

Loc Qty

Loc Code

ST564

42

m136136

8

M136620

34

110

Each

30.0000

8 8
**

DAS
6
9-89

JUN 15 2017

DAS
31
9-89

LN9037-08018

Purchased

No

LN9037-08018

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

ST564

30

m136136

4

m136172

4

m137315

22

110

Each

0.0000

5 5
**

DAS
6
9-89

DAS
31
9-89

M137391

MS21042-08

MS21042L08

Purchased

No

MS21042-08

USE MS21042L08

DAS
28
9-89

MS21042-3

MS21042L3

Purchased

No

MS21042-3

Nut

DAS
28
9-89

Location

Loc Qty

Loc Code

110

Each

0.0000

35 35
**

DAS
6
9-89

DAS
31
9-89

JUN 15 2017

JUN 15 2017

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Page 18

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">Skid-tube ☐</td> <td style="width: 15%;">Cross tube ☐</td> <td style="width: 15%;">Water Jet ☐</td> <td style="width: 15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																							
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Date : _____		Step # : _____		QTY Effective : _____			MRB (QS1042) Approval ☐																																																								
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OTHER : _____																																																															

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Page 19

Work Order ID: 162088

162088

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 6/1/2017

Required Date: 6/2/2017

Start Qty: 1.00

Required Qty: 1.00

MS21042L08

Purchased

No

110

Each

913.0000

**

5 JUN 15 2017

MS21042L08

Nut

DAS
28
9-89

Location

Loc Qty

Loc Code

GA	100
m135274	6
m135978	94
ST303	813
m137391	513
m137464	300

DAS
31
9-89

MS21042L4

Purchased

No

110

Each

2,930.000

**

4 JUN 15 2017

MS21042L4

Nut

DAS
28
9-89

Location

Loc Qty

Loc Code

FP001	10
m133363	10
GA	64
m135058	64
OVER007	1400
m137402	400
m137544	1000
ST303	1456
m137321	456
m137371	1000

DAS
31
9-89

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

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Work Order ID: 162088

162088

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 6/1/2017

Required Date: 6/2/2017

Start Qty: 1.00

Required Qty: 1.00

MS21042L5

Purchased No

110 Each

773.0000

4 4

6

9-89

JUN 15 2017

MS21042L5

Nut

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

16

m127813

16

ST303

757

m137361

57

m137478

200

m137587

500

DAS
31
9-89

MS21047-3

Purchased No

110 Each

227.0000

12 12

6

9-89

JUN 15 2017

MS21047-3

Nut Plate

DAS
28
9-89

Location

Loc Qty

Loc Code

ST301

227

m137075

77

m137459

150

DAS
31
9-89

MS21266-2N

Purchased No

110 Each

36.0000

1 1

DAS
6
9-89

JUN 15 2017

MS21266-2N

Grommet

DAS
28
9-89

Location

Loc Qty

Loc Code

ST294

36

123900

36

DAS
31
9-89

MS24694-S54

Purchased No

110 Each

73.0000

5 5

DAS
6
9-89

JUN 15 2017

MS24694-S54

SCREW

DAS
28
9-89

Location

Loc Qty

Loc Code

ST284

73

153846

73

DAS
31
9-89

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
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Root Cause		FAULT CATEGORY																							
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OTHER : ☐																									

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Work Order ID: 162088

162088

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 6/1/2017

Required Date: 6/2/2017

Start Qty: 1.00

Required Qty: 1.00

MS27039-08-07

Purchased

No

110

Each

91.0000

1

DAS

MS27039-08-07

SCREW

DAS
28
9-89

Location

Loc Qty

Loc Code

ST278

91

m132035

91

110

Each

285.0000

4

JUN 15 2017

DAS

MS27039-08-13

Purchased

No

MS27039-08-13

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

ST278

285

153849

285

110

Each

453.0000

5

JUN 15 2017

DAS
31
9-89

MS27039-08-19

Purchased

No

MS27039-08-19

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

30

m135948

26

m137178

4

over006

200

m137464

200

ST277

223

m135865

5

m137320

18

m137361

200

DAS
6
9-89

DAS
31
9-89

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DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																																																																																																																											
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Doc/Data	☐	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance																																																																																																																																																				
Equip/Tooling	☐	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect																																																																																																																																																				
Handling/Pre	☐	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing																																																																																																																																																				
Material	☐	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved																																																																																																																																																				
Internal Transport	☐	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing																																																																																																																																																				
Tribal Knowledge	☐	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish																																																																																																																																																				
LOA	☐	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread																																																																																																																																																				
Substation	☐	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence																																																																																																																																																				
Past Expiry Date	☐	☐	Manufacturing Process	OTHER : _____																																																																																																																																																											
Misidentified	☐	☐	Past Due																																																																																																																																																												

Picklist Print

Thursday, May 25, 2017 10:10:37 AM

Page 22

Work Order ID: 162088

162088

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 6/1/2017

Required Date: 6/2/2017

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-07

Purchased

No

110

Each

64.0000

3 3

MS27039-1-07

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

48

m137320

48

ST281

16

m135948

16

**

JUN 15 2017

DAS
6
9-89

DAS
31
9-89

MS27039-1-09

Purchased

No

110

Each

235.0000

12 12

MS27039-1-09

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

FP001

17

18057

17

GA

18

124859

18

ST280

200

m137544

200

**

JUN 15 2017

DAS
6
9-89

DAS
31
9-89

MS27039-1-10

Purchased

No

110

Each

497.0000

6 6

MS27039-1-10

SCREW

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

15

m129541

15

over006

300

m137597

300

ST280

182

m137164

182

**

JUN 15 2017

DAS
6
9-89

DAS
31
9-89

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Shop Packet Print

Page 22

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER : ☐						
Misidentified ☐	☐	Past Due ☐							

Picklist Print

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Page 23

Work Order ID: 162088

162088

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 6/1/2017

Required Date: 6/2/2017

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-12

Purchased

No

110

Each

71.0000

2 2

MS27039-1-12

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

ST280

71

m136537

21

m137320

50

110

Each

628.0000

4 4

MS27039-1-14

Purchased

No

MS27039-1-14

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

90

120449

90

over006

300

124326

300

ST280

238

124326

238

MS27039-1-15

Purchased

No

110

Each

99.0000

1 1

MS27039-1-15

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

65

m127916

1

m136554

64

ST280

34

m136406

34

Thursday, May 25, 2017 10:10:38 AM

Shop Packet Print

Page 23

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

Thursday, May 25, 2017 10:10:38 AM

Page 24

Work Order ID: 162088

162088

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 6/1/2017

Required Date: 6/2/2017

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-16

Purchased

No

110

Each

149.0000

4

4

MS27039-1-16

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

over006

50

m137061

50

ST280

99

m137320

99

MS27039-1-17

Purchased

No

110

Each

147.0000

2

2

MS27039-1-17

Screw (601.1954)

DAS
28
9-89

Location

Loc Qty

Loc Code

ST280

147

m127831

147

MS27039-1-18

Purchased

No

110

Each

1,615.000

2

2

MS27039-1-18

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

239

123522

39

124326

200

over006

1200

124326

1200

ST280

176

124326

176

JUN 15 2017

DAS
6
9-89

DAS
31
9-89

JUN 15 2017

DAS
6
9-89

DAS
31
9-89

JUN 15 2017

DAS
6
9-89

DAS
31
9-89

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐				Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐				Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐				Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐											
OTHER : ☐																									

Picklist Print

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Page 25

Work Order ID: 162088

162088

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 6/1/2017

Required Date: 6/2/2017

Start Qty: 1.00

Required Qty: 1.00

NAS1149C0432R

Purchased

No

110

Each

1,546.000

12

12

DAS

6

NAS1149C0432R

WASHER

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

357

m134676

357

ST260a

1000

m137459

1000

ST266

189

m136986

189

NAS1149F0332P

Purchased

No

110

Each

2,124.000

89

89

DAS

6

NAS1149F0332P

Washer

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

275

m133709

275

ST262

1849

m137075

49

m137412

1800

NAS1149F0532P

Purchased

No

110

Each

1,597.000

4

4

DAS

6

NAS1149F0532P

Washer

DAS
28
9-89

Location

Loc Qty

Loc Code

ST260a

600

m133725

600

ST262

997

18057

997

Thursday, May 25, 2017 10:10:38 AM

Shop Packet Print

Page 25

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval ☐	
Description Work Order Deviation		Disposition		Completed By _____	
				Lead hand / Supervisor Approval Verification ☐	
				QC / QA Coordinator Approval ☐	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Thursday, May 25, 2017 10:10:38 AM

Work Order ID: 162088

162088

Parent Item: 647.7304

647 7304

Parent Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 6/1/2017

Required Date: 6/2/2017

Start Qty: 1.00

Required Qty: 1.00

NAS1149FN832P

Purchased

No

110

Each

1,971.000

25

25

NAS1149FN832P

Washer

**

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

358

M135058

208

M136182

40

M136866

110

ST263

1613

M135603

11

M137412

1602

DAS
6
9-89

JUN 15 2017
DAS
31
9-89

NAS6603-12

Purchased

No

110

Each

111.0000

4

4

NAS6603-12

Bolt

**

DAS
28
9-89

Location

Loc Qty

Loc Code

st552

111

123900

76

m136301

35

DAS
6
9-89

DAS
31
9-89

NAS6603-16

Purchased

No

110

Each

56.0000

4

4

NAS6603-16

Bolt

**

DAS
28
9-89

Location

Loc Qty

Loc Code

st552

56

153860

6

m133523

50

DAS
6
9-89

DAS
31
9-89

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition			Completed By																		
							Lead hand / Supervisor Approval Verification																		
							QC / QA Coordinator Approval																		
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : ☐																		

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NOTES: UNLESS OTHERWISE SPECIFIED

- 1 AFTER INSTALLATION, APPLY F/N 90 A/R TO FILL GAPS AND FILLET EDGES.
- 2 APPLY F/N 91 TO FAYING SURFACES.
- 3 DELETED.
- 4 MATCH DRILL HOLES THROUGH F/N 26 or F/N 98 AND FUSELAGE.
- 5 SHIM GAP BETWEEN F/N 1 & 26 AS NEEDED.
- 6 AT CUSTOMERS OPTION, INSTALL F/N 96 BY MATCH DRILLING ONTO F/N 1 FOR KIT P/N 647.7301 or F/N 99 FOR KIT P/N 647.7304.
- 7 647.7301 INSTALLATION FOR EC135.
- 8 647.7304 INSTALLATION FOR EC135 T2/P2.
- 9 EXCEPT WHERE NOTED, INSTALLATION FOR 647.7304 AND 647.7307 SAME AS 647.7301.
- 10 CUT LENGTH: 16 INCHES.
- 11 INSTALLATION FOR 647.7307 AND 647.7304 ARE IDENTICAL EXCEPT 647.1405 (F/N 111) REPLACES 647.1404 (F/N 99).
- 12 DETAIL W REFLECTS THE UNIQUE 647.1405 ASSEMBLY (F/N 111) USED ON 647.7307 THAT REPLACES 647.1404 (F/N 99) ON 647.7304.
- 13 ADDITIONAL KITS FOR SUB-ASSEMBLIES OF THE 647.7301, 647.7304, AND 647.7307 ASSEMBLIES ARE DEFINED BY MPP-195

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 162088MCS
1705-20

4	4	4	50	601.3130	BOLT	NAS6603-16	
4	4	4	49	601.1500	BOLT	NAS6603-12	
4	4	4	48	601.2669	BOLT	ANAC7A	
1	1	1	47	601.1324	BOLT	AN4CH6A	
4	4	4	46	601.2826	BOLT	AN3-11A	
2	2	2	45	601.2823	BOLT	AN3-4A	
12	12	12	44	600.0795	NUTPLATE	MS21047-3	
2	2	2	43	601.3004	CAMLOC STUD		
2	2	2	42	601.3005	CAMLOC RETAINER		
2	2	2	41	601.3006	CAMLOC RECEPTACLE		
4	4	4	40	601.3119	CLEVIS	AN665-34R	
2	2	2	39	601.3120	EYE BOLT	AN44-12A	
			38	601.3121	EYE BOLT	A1444-5A	
1	1	1	37	601.3007	GROMMET	MS21266-2N	
A/R	A/R	A/R	36	601.3011	P-SEAL		△
1	1	1	35	647.3201	GROUNDING CABLE ASSY		
			34	647.2511	NUT		
			33	647.2510	SLEEVE		
13	13	13	32	647.1812	SHIM		
2	2	2	31	647.1811	SPACER		
1	1	1	30	647.1602	DOUBLER ASSY		
1	1	1	29	647.1914	BRACKET		
1	1	1	28	647.7822	EYE BOLT FITTING RH		
1	1	1	27	647.7821	EYE BOLT FITTING LH		
			26	647.7818	MOUNTING CHANNEL		
7307	7304	7301	FIND #	PART #	DESCRIPTION	MATL	SPEC

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	LAST PROTOTYPE REVISION: PRA		N/C
1	INITIAL RELEASE	01/13/09	P. BRAVO
A	INCORPORATED ECH 03036, 03044, 03066	02/16/11	P. BRAVO
B	INCORPORATED ECH 03023	03/09/16	P. BRAVO
C	INCORPORATED ECH 03550, 05465	11/01/14	P. BRAVO

		1	25	647.7820	CROSS BRACKET AFT		
1	1	1	24	647.7819	CROSS BRACKET FWD		
1	1	1	23	647.7918	BRACKET		
1	1	1	22	647.7917	BRACKET		
2	2	2	21	647.7916	BRACKET		
1	1	1	20	647.7915	BRACKET		
1	1	1	19	647.7914	BRACKET		
2	2	2	18	647.7913	DOUBLER		
4	4	4	17	647.7912	CLIP		
2	2	2	16	647.7911	BRACKET		
2	2	2	15	647.7910	ANGLE BRACKET		
4	4	4	14	647.0112	STRUT BRACKET		
1	1	1	13	647.1810	NOSE DOOR DOUBLER		
1	1	1	12	647.1818	NOSE DOOR SPACER		
2	2	2	11	647.7701	STRUT ASSY		
2	2	2	10	647.7702	STRUT ASSY		
1	1	1	9	647.1815	GUSSET, RH		
1	1	1	8	647.1814	GUSSET, LH		
1	1	1	7	647.1915	SUPPORT ANGLE		
1	1	1	6	647.1913	TEE		
1	1	1	5	647.1610	WIPER DEFLECTOR, FWD		
1	1	1	4	647.1601	WIPER DEFLECTOR ASSY, AFT		
			3	647.1701	SKID DEFLECTOR ASSY		
1	1	1	2	647.7501	LOWER CUTTER ASSY		
			1	647.7401	UPPER CUTTER ASSY		
X				647.7307	EC135 T3/P3 CABLE CUTTERS KIT		△
				647.7306	T2/P2 REMOVABLE PROVISIONS KIT		△
				647.7305	T2/P2 FIXED PROVISIONS KIT		△
X				647.7304	EC135 T2/P2 CABLE CUTTERS KIT		△
				647.7303	T1/P1 REMOVABLE PROVISIONS KIT		△
				647.7302	T1/P1 FIXED PROVISIONS KIT		△
				647.7301	EC135 T1/P1 CABLE CUTTERS KIT		△
7307	7304	7301	FIND #	PART #	DESCRIPTION	MATL	SPEC

QTY	1	ORIGINAL DATE	11/24/09
NEXT ASSY (S)		DRAWN BY	11/24/09
		A. QIAN	CHECKER
		DRAWING APPROVAL	
		P. BRAVO	
		01/13/09	
		CONTRACT NO.	
		UNLESS OTHERWISE SPECIFIED	
		DIMENSIONS ARE IN INCHES	
		TOLERANCES ARE	
		3 PLACE DECIMALS ±.015	
		ANGLES ±.5°	

DART 3030 ENTERPRISE CT., SUITE A
VISTA, CA 92081
(760) 724-5300

EC135 CABLE CUTTERS KIT

SIZE: CAGE CODE: DWG. NO. **647.7300** REV. **C**
B 07M16 SCALE: NONE SHEET 1 OF 8

DQA: _____ Date: _____

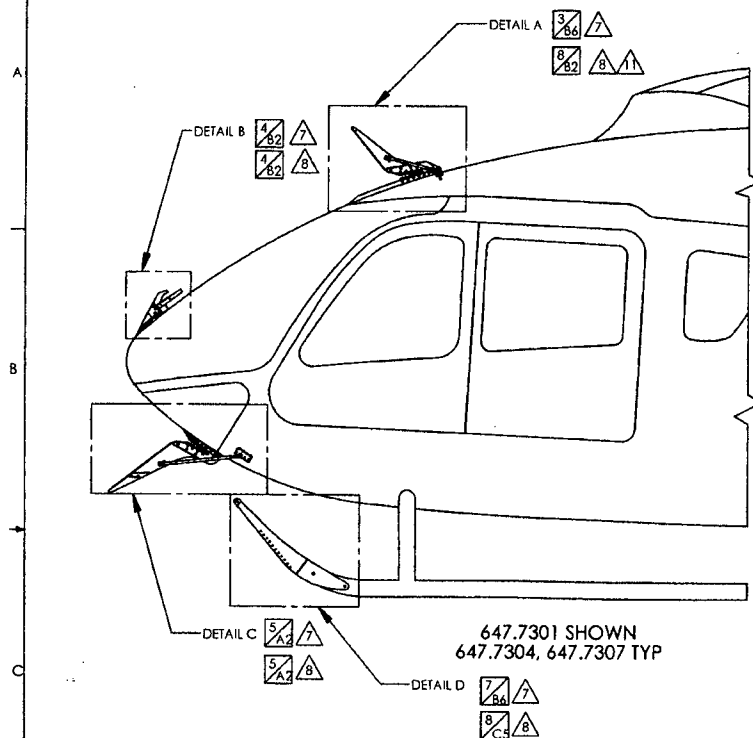
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval			
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval			
Root Cause		FAULT CATEGORY									
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐					
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐					
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐					
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐					
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐					
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐					
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐					
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐					
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐					
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐					
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER :								
Misidentified ☐	☐	Past Due ☐									

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647.7301 SHOWN
647.7304, 647.7307 TYP

1			111	647.1405	CUTTER ASSY (UPPER)		
2	2		110	601.3902	EYE BOLT		
2	2		109	601.2910	SCREW	MS27039-1-18	
4	4		108	601.3963	BOLT	93435A212	
8	8		107	601.3654	BOLT	UN9037-08018	
8	8		106	601.3655	LOCK WASHER	UN9225-0802K	
2	2		105	647.1702	SKID DEFLECTOR ASSY		
8	8	8	104	601.3214	CHERRY RIVET	CR3323-5-3	
24	24	24	103	601.3213	CHERRY RIVET	CR3323-4-4	
4	4	4	102	601.3212	CHERRY RIVET	CR3323-4-3	
5	5		101	601.1541	LOCKNUT	MS21042-08	
5	5		100	601.2765	SCREW	MS27039-0819	
1	1		98	647.2114	UPPER U CHANNEL		
1	1		97	647.7823	CROSS BRACKET AFT		
1	1	1	96	647.5701	GPS MOUNT KIT		
7307	7304	7301	FIND #	PART #	DESCRIPTION	MAT'L	SPEC

		8	95	601.1097	WASHER		NAS1149F0463P
		1	94	647.7919	SHIM		
A/R	A/R	A/R	93	600.0990	MAGNOBOND 6398 PART A		
A/R	A/R	A/R	92	600.0991	MAGNOBOND 6398 PART B		
A/R	A/R	A/R	91	601.2045	RTV	LOCHITE 599	
A/R	A/R	A/R	90	600.1012	SEALANT	PR-1435 CLASS B	
3	3	3	89	601.2375	WASHER		
4	4	4	88	601.3126	WASHER	NAS1149F0533P	
12	12	8	87	601.3663	WASHER	NAS1149C0432K	
89	89	86	86	601.1607	WASHER	NAS1149F0332P	
25	25	14	85	601.2764	WASHER	NAS1149F0832P	
2	2	2	84	601.3136	CHERRY RIVET	CR3212-5-6	
8	8	8	83	601.3215	CHERRY RIVET	CR3522-5-3	
8	8	8	82	601.3216	CHERRY RIVET	CR3522-4-3	
12	12	12	81	601.2481	CHERRY RIVET	CR3213-5-4	
16	16	16	80	601.2020	CHERRY RIVET	CR3213-5-3	
17	17	17	79	601.2991	CHERRY RIVET	CR3213-4-6	
8	8	8	78	601.1183	CHERRY RIVET	CR3213-4-5	
16	16	16	77	601.1915	CHERRY RIVET	CR3213-4-4	
24	24	24	76	601.0790	CHERRY RIVET	CR3213-4-3	
4	4	4	75	601.1604	CHERRY RIVET	CR3213-4-2	
4	4	4	74	601.1983	NUTPLATE RIVET	CR27455-3-03	
24	24	24	73	601.2207	NUTPLATE RIVET	CR26455-3-03	
3	3	3	72	601.2999	SCREW		
5	5	6	71	601.2829	SCREW	MS2469-4554	
2	2	2	70	601.1954	SCREW	MS27039-1-17	
4	4	4	69	601.2637	SCREW	MS27039-1-16	
1	1	1	68	601.3012	SCREW	MS27039-1-15	
4	4	4	67	601.1622	SCREW	MS27039-1-14	
2	2	2	66	601.1953	SCREW	MS27039-1-12	
6	6	6	65	601.1365	SCREW	MS27039-1-10	
12	12	12	64	601.3069	SCREW	MS27039-1-09	
3	3	3	63	601.2198	SCREW	MS27039-1-07	
		2	62	601.3137	SCREW	MS27039-0816	
4	4	4	61	601.2988	SCREW	MS27039-0813	
1	1	1	60	601.2525	SCREW	MS27039-0807	
4	4	4	59	601.3127	LOCKNUT	MS21042L5	
2	2	2	58	647.8512	INSERT		
4	4	4	57	647.8511	INSERT		
20	20	18	56	647.8510	INSERT		
4	4	4	55	601.3128	NUT	AN316CAR	
4	4	8	54	601.3209	LOCKNUT	MS21042L4	
35	35	34	53	601.2943	LOCKNUT	MS21042-3	
5	5	7	52	601.2973	LOCKNUT	MS21042-08	
		4	51	601.3002	BOLT	NAS6604-66	
7307	7304	7301	FIND #	PART #	DESCRIPTION	MAT'L	SPEC

ORIGINAL DATE
11/24/09
DRAWN BY
A. QUAY
CHECKED
D. BAKER
DRAWING APPROVAL
P. BRAVO
01/13/10
CONTRACTING

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
2 PLACE DECIMALS ±.01
3 PLACE DECIMALS ±.005
ANGLES ±.5°

DART 3030 ENTERPRISE CT., SUITE A
VISTA, CA. 92081
(760)-724-5300
APICAL INDUSTRIES INC.
DSI DART AEROSPACE
EC135 CABLE CUTTERS KIT
REV. C
SCALE NONE
SHEET 2 OF 8

DQA: _____ Date: _____



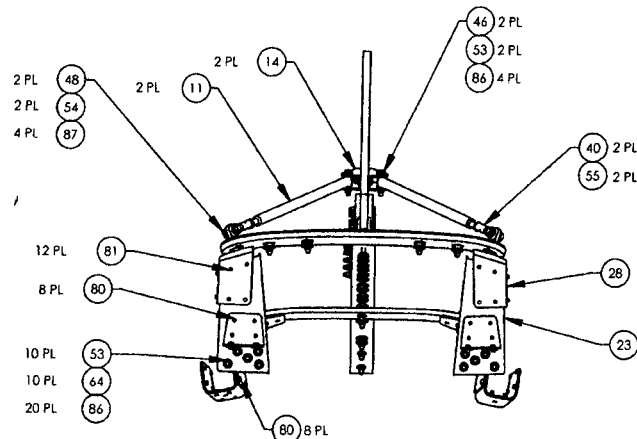
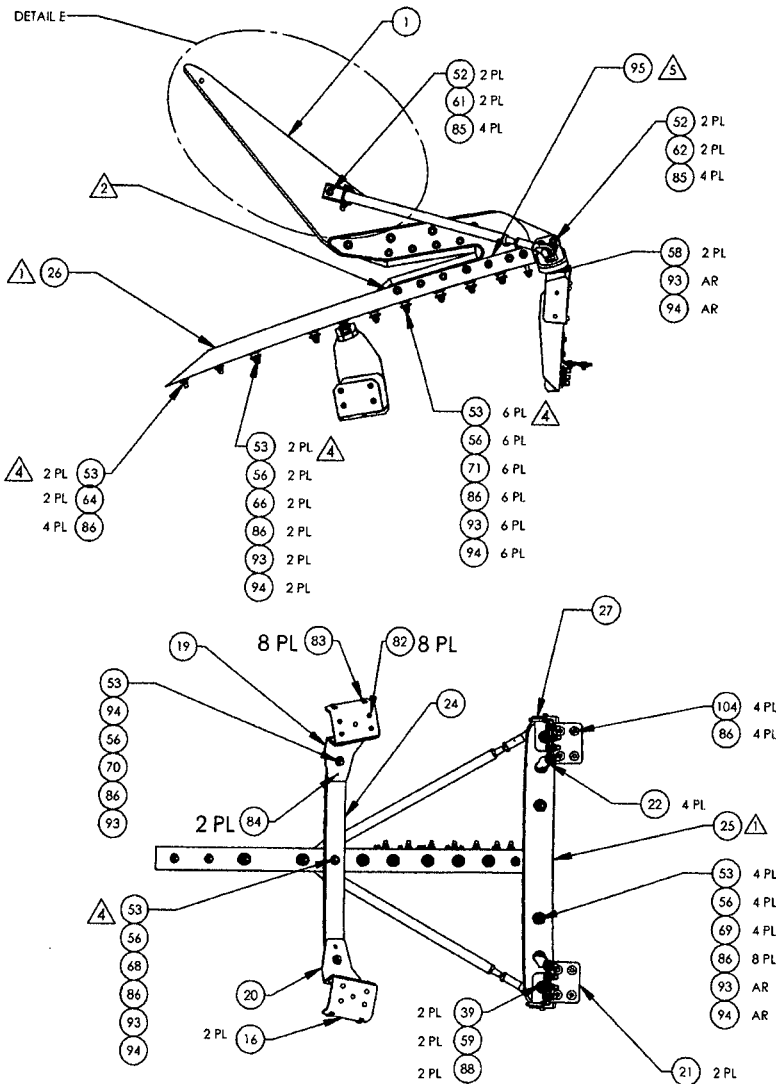
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

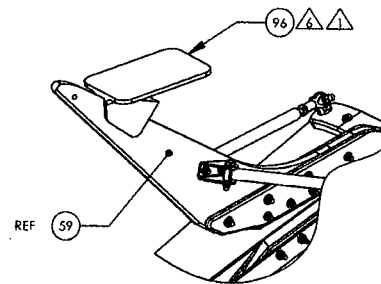
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER :						
Misidentified ☐	☐	Past Due ☐							

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DETAIL A



DETAIL E
TYPICAL GPS MOUNT KIT INSTALLATION

ORIGINAL DATE UNSCALED		11/24/08	
DRAWN BY A. QUAN	CHECKED J. MARKER	SUITE A	
DESIGNING APPROVAL P. BRAY	CONTRACT NO.	3030 ENTERPRISE CT., VISTA, CA, 92081 (760)-724-5300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLE ± 5°		SCALE NONE	SHEET 3 OF 8

DART AEROSPACE AFICAL INDUSTRIES, INC. dba DART AEROSPACE		3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300	
EC135 CABLE CUTTERS KIT			
SIZE B	CAGE CODE 07M26	DWG. NO. 647.7300	REV. C
SCALE NONE		SHEET 3 OF 8	

DQA: _____ Date: _____



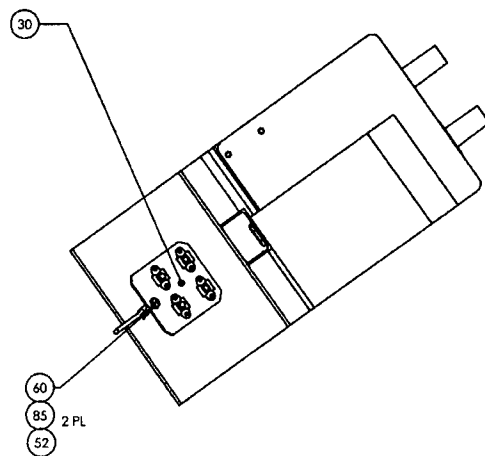
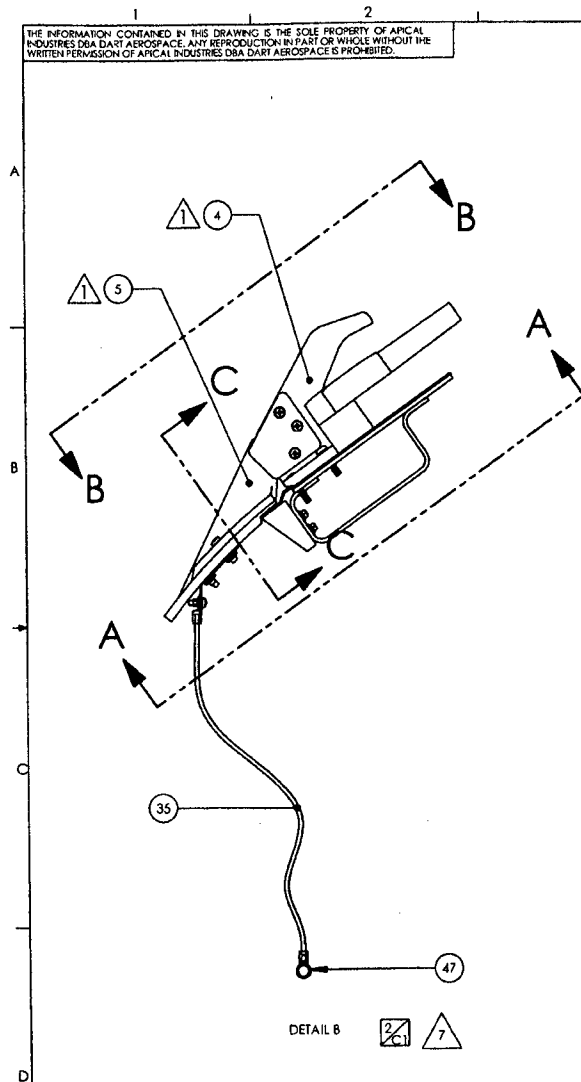
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

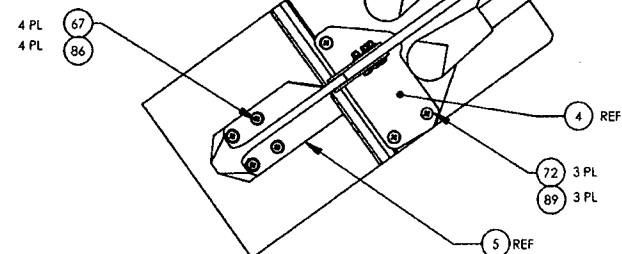
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

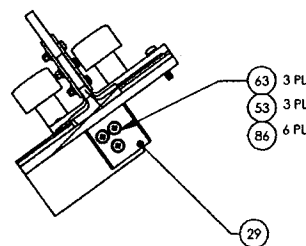
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SECTION A-A



SECTION B-B



SECTION C-C

ORIGINAL DATE (DD-MN-YY)	11/24/99	DART 3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300	
DRAWN BY A. QUAN	QC/WEB	APICAL INDUSTRIES INC. DBA DART AEROSPACE	
DRAWING APPROVAL P. BRAVO	01/13/10	EC135 CABLE CUTTERS KIT	
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ± .01 3 PLACE DECIMALS ± .005 ANGLES ± .5°	SEE CAGE CODE B 07MZ6	DWG. NO. 647.7300	REV. C
	SCALE: NONE	SHEET 4 OF 8	

DQA: _____ Date: _____



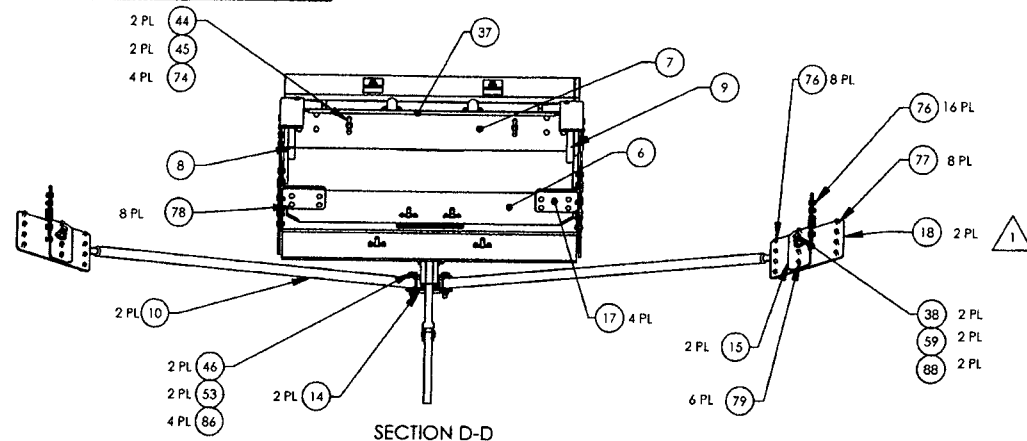
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

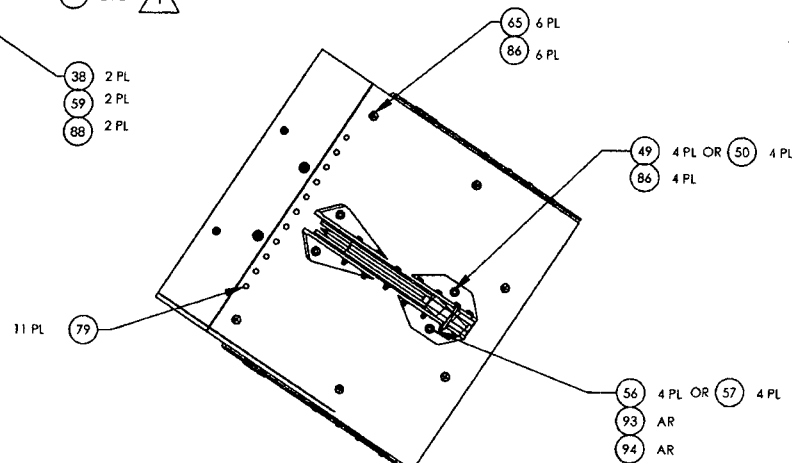
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER : _____						
Misidentified ☐	☐	Past Due ☐							

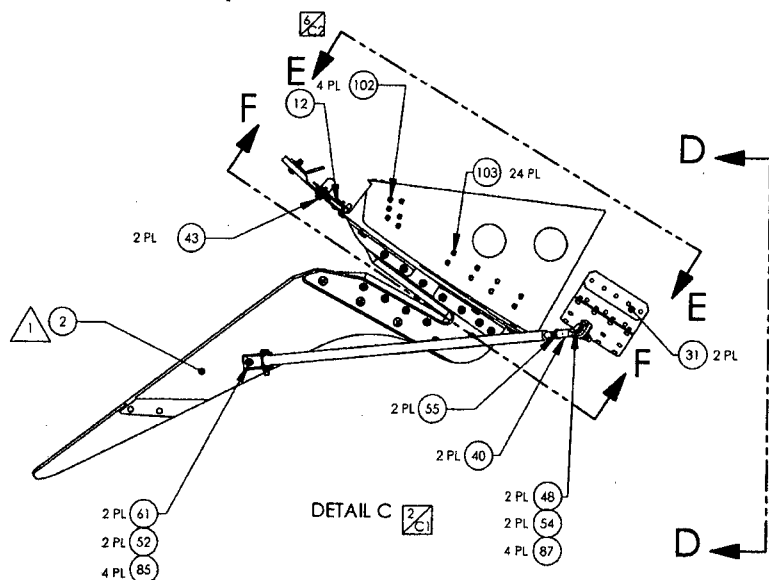
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SECTION D-D



SECTION F-F



DETAIL C

ORIGINAL DATE (INC-25A-10)	11/24/89	DART AEROSPACE 3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300 APICAL INDUSTRIES INC. DBA DART AEROSPACE
DRAWN BY A. GUAN	CHECKER D. BARKER	
DRAWING APPROVAL F. BRAVO 01/13/90		
CONTRACT NO.		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		EC135 CABLE CUTTERS KIT SHEET 5 OF 8

DQA: _____ Date: _____



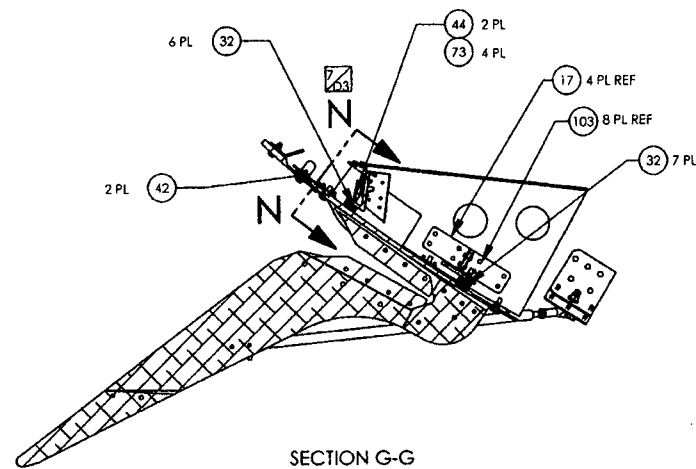
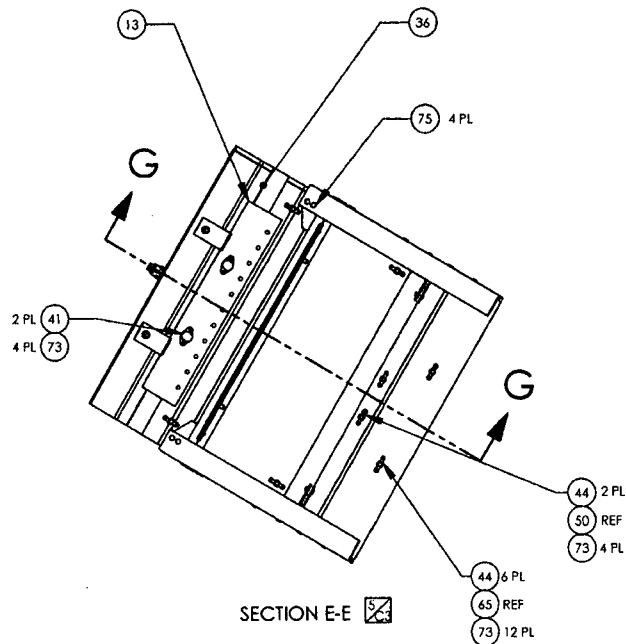
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐		No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																			
Design ☐		Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐																			
Doc/Data ☐		Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐																			
Equip/Tooling ☐		Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐																			
Handling/Pre ☐		Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐																			
Material ☐		Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐																			
Internal Transport ☐		Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐																			
Tribal Knowledge ☐		Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐																			
LOA ☐		Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐																			
Substation ☐		Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐																			
Past Expiry Date ☐		Manufacturing Process ☐	OTHER : ☐																						
Misidentified ☐		Past Due ☐																							

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ORIGINAL DATE 11/24/09		3030 ENTERPRISE CT., SUITE A, VISTA, CA 92081 (760)-724-5300	
DRAWN BY A. CHAN		CHECKED BY D. BARKER	
DRAWING APPROVAL A. CHAN		APICAL INDUSTRIES, INC. DBA DART AEROSPACE	
CONTRACT NO.		EC135 CABLE CUTTERS KIT	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS .0151 3 PLACE DECIMALS .0005 ANGLES ± .5°		REV. C	647.7300
SCALE NONE		SHEET 6 OF 8	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

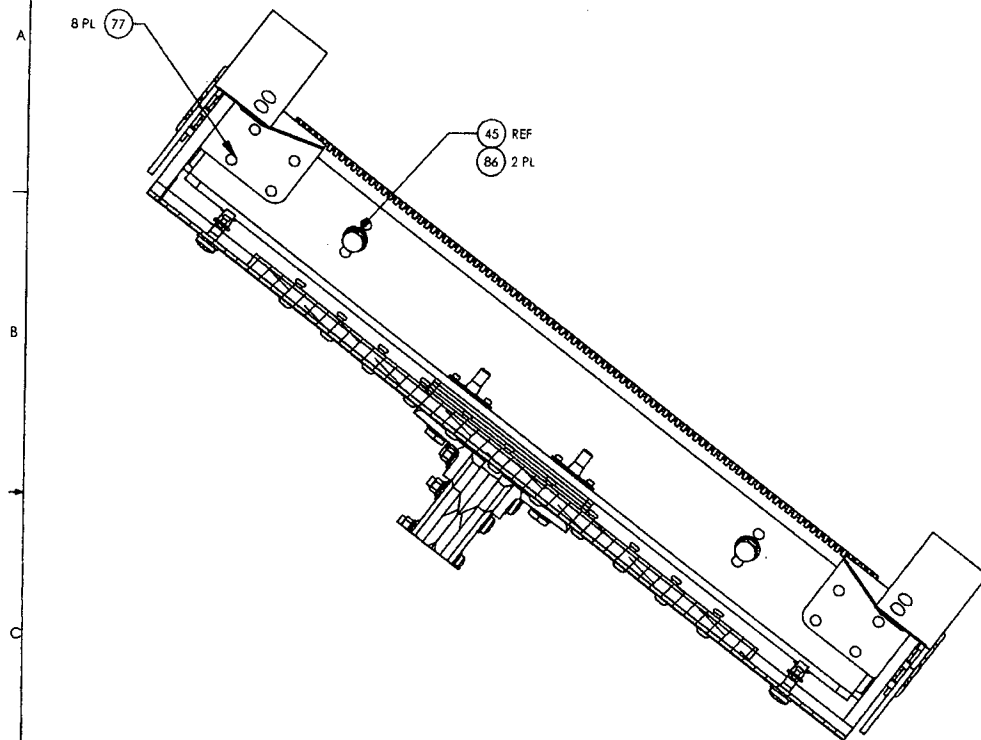
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

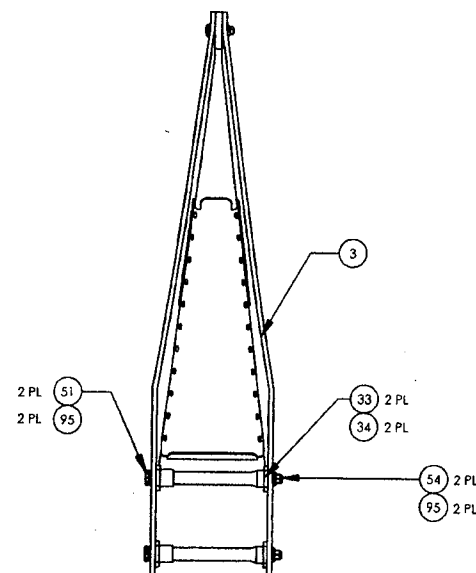
1 2 3 4 5 6 7 8

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SECTION N-N

INBOARD



DETAIL D
TYP 2 PL

ORIGINAL DATE 11/24/99		DART AEROSPACE 3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300		
DRAWN BY A. GUAN				
CHECKED BY D. BARNER		APICAL INDUSTRIES INC. DBA DART AEROSPACE		
DRAWING APPROVAL P. BRAVO S. L. LIO				
CONTRACT NO.		EC135 CABLE CUTTERS KIT		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		SIZE B	CAGE CODE 07M26	DWG. NO. 647.7300
		SCALE NONE		REV. C
		SHEET 7 OF 8		

DQA: _____ Date: _____



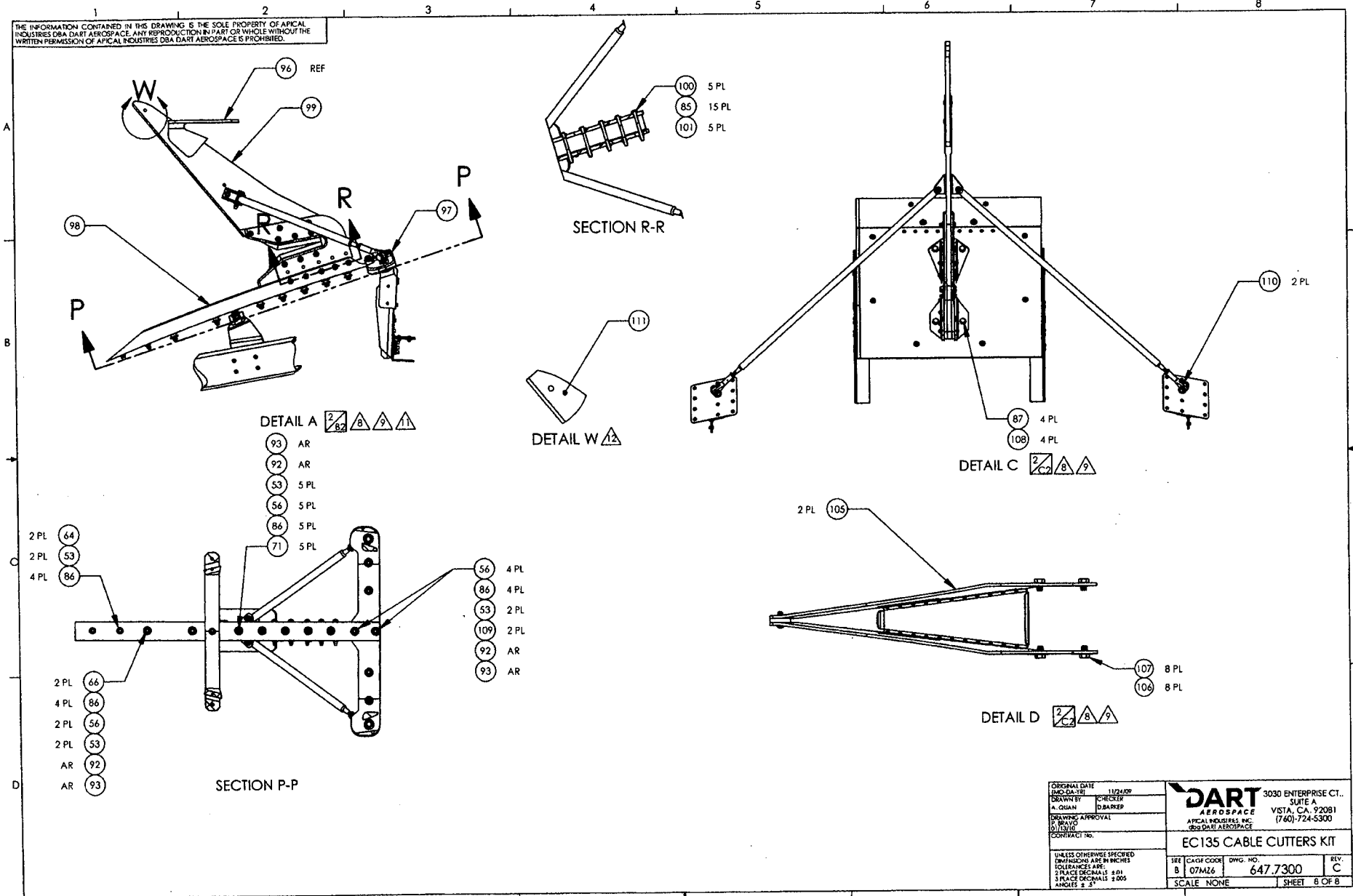
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval																																																									
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : ☐			
Misidentified ☐	Past Due ☐																																																																

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

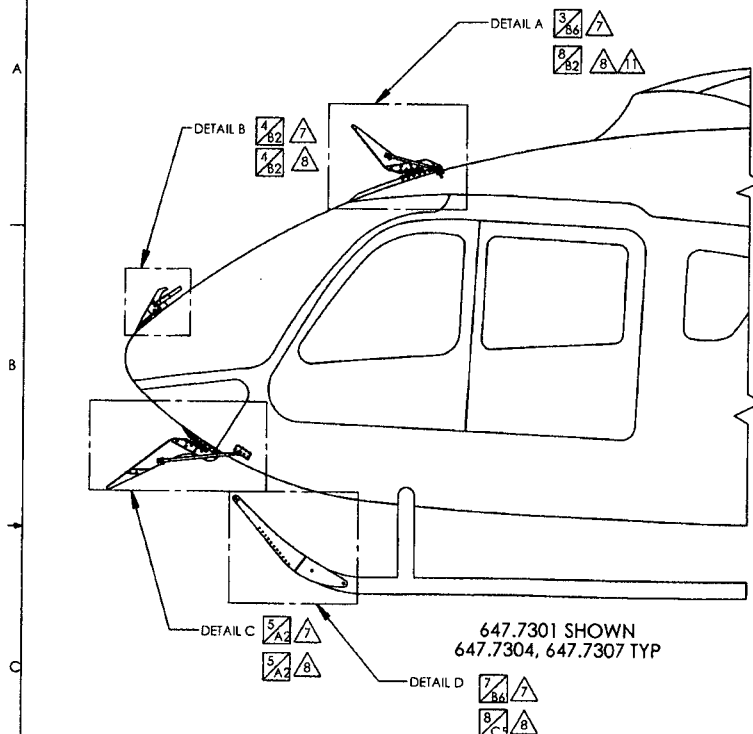
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐			FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
OTHER : ☐								

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REFERENCE ONLY



647.7301 SHOWN
647.7304, 647.7307 TYP

1		111	647.1405	CUTTER ASSY (UPPER)		
2	2	110	601.3902	EYE BOLT		
2	2	109	601.2910	SCREW	MS27039-1-18	
4	4	108	601.3963	BOLT	93635-A212	
8	8	107	601.3654	BOLT	LN9037-08018	
8	8	106	601.3655	LOCK WASHER	LN9025-0820K	
2	2	105	647.1702	SKID DEFLECTOR ASSY		
8	8	104	601.3214	CHERRY RIVET	CR3525-5-3	
24	24	103	601.3213	CHERRY RIVET	CR3525-4-4	
4	4	102	601.3212	CHERRY RIVET	CR3525-4-3	
5	5	101	601.1541	LOCKNUT	MS21042L08	
5	5	100	601.2765	SCREW	MS27039-0819	
1	1	98	647.2114	UPPER U CHANNEL		
1	1	97	647.7823	CROSS BRACKET AFF		
1	1	96	647.5701	GPS MOUNT KIT		
7307	7304	7301	FIND #	PART #	DESCRIPTION	MAT'L SPEC

		8	95	601.1097	WASHER	NAS1149F0463P	
		1	94	647.7919	SHIM		
A/R	A/R	A/R	93	600.0990	MAGNOBOND 6398 PART A		
A/R	A/R	A/R	92	600.0991	MAGNOBOND 6398 PART B		
A/R	A/R	A/R	91	601.2045	RTV	LOCITE 598	
A/R	A/R	A/R	90	600.1012	SEALANT	PR-1425 CLASS B	
3	3	89	601.2375	WASHER			
4	4	88	601.3126	WASHER	NAS1149F0432P		
12	12	87	601.3663	WASHER	NAS1149C0432R		
89	89	86	601.1607	WASHER	NAS1149F0332P		
25	25	14	85	601.2764	WASHER	NAS1149F0832P	
2	2	84	601.3136	CHERRY RIVET	CR3212-5-6		
8	8	83	601.3215	CHERRY RIVET	CR3522-5-3		
8	8	82	601.3216	CHERRY RIVET	CR3522-4-3		
12	12	81	601.2481	CHERRY RIVET	CR3213-5-4		
16	16	80	601.2020	CHERRY RIVET	CR3213-5-3		
17	17	79	601.2991	CHERRY RIVET	CR3213-4-6		
8	8	78	601.1183	CHERRY RIVET	CR3213-4-5		
16	16	77	601.1915	CHERRY RIVET	CR3213-4-4		
24	24	76	601.0790	CHERRY RIVET	CR3213-4-3		
4	4	75	601.1604	CHERRY RIVET	CR3213-4-2		
4	4	74	601.1983	NUTPLATE RIVET	CCR27455-3-03		
24	24	73	601.2207	NUTPLATE RIVET	CCR26455-3-03		
3	3	72	601.2999	SCREW			
5	5	71	601.2829	SCREW	MS24694554		
2	2	70	601.1954	SCREW	MS27039-1-17		
4	4	69	601.2637	SCREW	MS27039-1-16		
1	1	68	601.3012	SCREW	MS27039-1-15		
4	4	67	601.1622	SCREW	MS27039-1-14		
2	2	66	601.1953	SCREW	MS27039-1-12		
6	6	65	601.1365	SCREW	MS27039-1-10		
12	12	64	601.3069	SCREW	MS27039-1-09		
3	3	63	601.2198	SCREW	MS27039-1-07		
		62	601.3137	SCREW	MS27039-0816		
4	4	61	601.2988	SCREW	MS27039-0813		
1	1	60	601.2525	SCREW	MS27039-0807		
4	4	59	601.3127	LOCKNUT	MS21042L5		
2	2	58	647.8512	INSERT			
4	4	57	647.8511	INSERT			
20	20	56	647.8510	INSERT			
4	4	55	601.3128	NUT	AN3164C4R		
4	4	54	601.3209	LOCKNUT	MS21042L4		
35	35	53	601.2943	LOCKNUT	MS21042-3		
5	5	52	601.2973	LOCKNUT	MS21042-08		
		51	601.3002	BOLT	NAS6604-66		
7307	7304	7301	FIND #	PART #	DESCRIPTION	MAT'L	SPEC

ORIGINAL DATE
11/24/09
DRAWN BY
A. OSHAN
CHECKED BY
D. BARKER
DRAWING APPROVAL
P. BRAY
OUTSIDE
CONTRACT NO.

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
2 PLACE DECIMALS ±.01
3 PLACE DECIMALS ±.005
ANGLES ±.1°

DART 3030 ENTERPRISE CT.,
AEROSPACE SUITE A
APICAL INDUSTRIES INC. VISTA, CA. 92081
(760) 724-5300
DBA DART AEROSPACE

EC135 CABLE CUTTERS KIT

SHEET 2 OF 8
CAGE CODE 07M26
DWG. NO. 647.7300
SCALE NONE
REV. C

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES DBA DART AEROSPACE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES DBA DART AEROSPACE IS PROHIBITED.

NOTES: UNLESS OTHERWISE SPECIFIED

- 1 AFTER INSTALLATION, APPLY F/N 90 A/R TO FILL GAPS AND FILLET EDGES.
- 2 APPLY F/N 91 TO FAYING SURFACES.
- 3 DELETED.
- 4 MATCH DRILL HOLES THROUGH F/N 26 or F/N 98 AND FUSELAGE.
- 5 SHIM GAP BETWEEN F/N 1 & 26 AS NEEDED.
- 6 AT CUSTOMERS OPTION, INSTALL F/N 96 BY MATCH DRILLING ONTO F/N 1 FOR KIT P/N 647.7301 or F/N 99 FOR KIT P/N 647.7304.
- 7 647.7301 INSTALLATION FOR EC135.
- 8 647.7304 INSTALLATION FOR EC135 T2/P2.
- 9 EXCEPT WHERE NOTED, INSTALLATION FOR 647.7304 AND 647.7307 SAME AS 647.7301.
- 10 CUT LENGTH: 16 INCHES.
- 11 INSTALLATION FOR 647.7307 AND 647.7304 ARE IDENTICAL EXCEPT 647.1405 (F/N 111) REPLACES 647.1404 (F/N 99).
- 12 DETAIL W REFLECTS THE UNIQUE 647.1405 ASSEMBLY (F/N 111) USED ON 647.7307 THAT REPLACES 647.1404 (F/N 99) ON 647.7304.
- 13 ADDITIONAL KITS FOR SUB-ASSEMBLIES OF THE 647.7301, 647.7304, AND 647.7307 ASSEMBLIES ARE DEFINED BY MPP-195

REFERENCE ONLY

4	4	4	50	601.3130	BOLT	NAS6603-16	
4	4	4	49	601.1500	BOLT	NAS6603-12	
4	4	4	48	601.2669	BOLT	ANAC7A	
1	1	1	47	601.1324	BOLT	ANAC6A	
4	4	4	46	601.2826	BOLT	AN3-11A	
2	2	2	45	601.2823	BOLT	AN3-4A	
12	12	12	44	600.0795	NUTPLATE	MS21047-3	
2	2	2	43	601.3004	CAMLOC STUD		
2	2	2	42	601.3005	CAMLOC RETAINER		
2	2	2	41	601.3006	CAMLOC RECEPTACLE		
4	4	4	40	601.3119	CLEVIS	AN665-34R	
2	2	2	39	601.3120	EYE BOLT	AN44-12A	
			38	601.3121	EYE BOLT	AN44-5A	
1	1	1	37	601.3007	GROMMET	MS21265-9T	
A/R	A/R	A/R	36	601.3011	P-SEAL		
1	1	1	35	647.3201	GROUNDING CABLE ASSY		
			34	647.2511	NUT		
			33	647.2510	SLEEVE		
13	13	13	32	647.1812	SHIM		
2	2	2	31	647.1811	SPACER		
1	1	1	30	647.1602	DOUBLER ASSY		
1	1	1	29	647.1914	BRACKET		
1	1	1	28	647.7822	EYE BOLT FITTING RH		
1	1	1	27	647.7821	EYE BOLT FITTING LH		
			26	647.7818	MOUNTING CHANNEL		
7307	7304	7301	FIND #	PART #	DESCRIPTION	MAT'L	SPEC

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
	LAST PROTOTYPE REVISION: PRA		N/C
N/C	INITIAL RELEASE	01/13/09	P. BRAVO
A	INCORPORATED ECN 0236, 03000, 03044, 03066	02/16/11	P. BRAVO
B	INCORPORATED ECN 05325	03/09/14	P. BRAVO
C	INCORPORATED ECN 05540, 05455	11/07/14	P. BRAVO

		1	25	647.7820	CROSS BRACKET AFT		
1		1	24	647.7819	CROSS BRACKET FWD		
1		1	23	647.7918	BRACKET		
1		1	22	647.7917	BRACKET		
2		2	21	647.7916	BRACKET		
1		1	20	647.7915	BRACKET		
1		1	19	647.7914	BRACKET		
2		2	18	647.7913	DOUBLER		
4		4	17	647.7912	CLIP		
2		2	16	647.7911	BRACKET		
2		2	15	647.7910	ANGLE BRACKET		
4		4	14	647.8112	STRUT BRACKET		
1		1	13	647.1810	NOSE DOOR DOUBLER		
1		1	12	647.1818	NOSE DOOR SPACER		
2		2	11	647.7701	STRUT ASSY		
2		2	10	647.7702	STRUT ASSY		
1		1	9	647.1815	GUSSET, LH		
1		1	8	647.1814	GUSSET, RH		
1		1	7	647.1915	SUPPORT ANGLE		
1		1	6	647.1913	TEE		
1		1	5	647.1610	WIPER DEFLECTOR, FWD		
1		1	4	647.1601	WIPER DEFLECTOR ASSY, AFT		
			3	647.1701	SKID DEFLECTOR ASSY		
1		1	2	647.7501	LOWER CUTTER ASSY		
			1	647.7401	UPPER CUTTER ASSY		
X				647.7307	EC135 T3/P3 CABLE CUTTERS KIT		
				647.7306	T2/P2 REMOVABLE PROVISIONS KIT		
				647.7305	T2/P2 FIXED PROVISIONS KIT		
				647.7304	EC135 T2/P2 CABLE CUTTERS KIT #		
				647.7303	T1/P1 REMOVABLE PROVISIONS KIT		
				647.7302	T1/P1 FIXED PROVISIONS KIT		
				647.7301	EC135 T1/P1 CABLE CUTTERS KIT		
7307	7304	7301	FIND #	PART #	DESCRIPTION	MAT'L	SPEC

QTY	1	ORIGINAL DATE (M/D/Y)	11/24/09
NEXT ASSY (S)		DRAWN BY	CHICOUR
		A. QUAN	BARBER
		DRAWING APPROVAL	
		P. BRAVO	01/13/09
		CONTRACT NO.	
		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ±.01 ANGLES ±.5°	
382		CAGE CODE	07M26
B		OWG. NO.	647.7300
SCALE		NONE	
SHEET		1 OF 8	

DART 3030 ENTERPRISE CT., SUITE A
VISTA, CA 92081
(760) 724-5300

APICAL INDUSTRIES, INC.
DBA DART AEROSPACE

EC135 CABLE CUTTERS KIT

REV. C

Work Order ID 162088

Thursday, May 25, 2017 10:10:32 AM

162088

Ship JUNE 13

Page 1

Item ID: 647.7304

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: EC135 T2/P2 Cable Cutters System

Start Date: 6/1/2017 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 6/2/2017 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals:

Process Plan:

Date: MAY 25 2017 Tooling:

Date:

Run Start ***NR1***

QC:

Date: SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

647.7300

C

100

Document Control

JUN 14 2017

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile & type labels per PPP 647.7304

CB

JUN 13 2017

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

120

QC4- 100% Inspect kits for completeness

0.00

120

QC

Memo

0.00

Quality Control

United States Of America
Department of Transportation - Federal Aviation Administration
Supplemental Type Certificate

Number SR02307LA

This Certificate issued to

Apical Industries, Inc. dba Dart Aerospace
3030 Enterprise Court, Suite A
Vista, California 92081

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified herein meets the airworthiness requirements of Part 27 of the Federal Aviation Regulations.*

* Certification basis set forth in Type Certificate Data Sheet H88EU.

Original Product Type Certificate Number: H88EU

Model: Eurocopter

Model: EC135 P1, T1, P2, T2, P2+, T2+, P3, T3

Description of Type Design Change: Installation of Apical Industries, Inc. Cable Cutters Kit in accordance with FAA approved Apical Industries, Inc. Master Document List MD135-2, Revision A, dated June 24, 2010, or later FAA approved revision.

Limitations and Conditions: This approval requires the inspections and overhaul schedules to be performed as mandated by Apical Industries, Inc.'s Instructions for Continued Airworthiness, ICA135-21, Revision N/C, dated January 13, 2010, or later FAA accepted revision.

This installation should not be incorporated in any aircraft unless it is determined that the interrelationship between this installation and any previously approved configuration will not introduce any adverse effect upon the airworthiness of the aircraft. If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of this permission.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: December 03, 2009

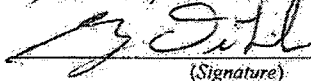
Date reissued: August 7, 2014

Date of issuance: July 14, 2010

Date amended: November 29, 2016



By direction of the Administrator


(Signature)

Gregory S. DiLibero
Manager, Airframe Branch
Los Angeles Aircraft Certification Office

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.